

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 1. (Currently amended): A method performed by a presentation recorder
2 device of communicating information received during a multimedia presentation, comprising:
3 providing an adapter comprising a transceiver;
4 receiving[[],] at the adapter, first information at the presentation recorder device
5 from a first system, the first information including at least one of video information or audio
6 information from a first system, the at least one of video information or audio information
7 generated from a presentation file;
8 receiving[[],] at the adapter, second information at the presentation recorder
9 device, the second information including at least one of video information or audio information
10 audio or video information from a capture device, the second information captured by the
11 capture device during the multimedia presentation;
12 differencing between a first video frame and a second video frame, at the adapter,
13 of the video information received from the first system or the capture device analyzing video
14 information received from the first system or video information received from the capture device
15 at the presentation recorder device to determine a difference between a first video frame and a
16 second video frame;
17 selecting based on the differencing, at the adapter, a set of one or more keyframes
18 at the presentation recorder device from the analyzed video information received from the first
19 system or the analyzed video information received from the capture device in response to a user-
20 configurable threshold and the difference between a first video frame and a second video frame;
21 and

22 analyzing the first information and the second information at the presentation
23 recorder device to extract textual information from the first information or the second
24 information using one or more text recognition techniques;

25 generating a presentation representation at the presentation recorder device of the
26 first information and the second information, the presentation representation including a
27 representation of each keyframe in the set of keyframes and the textual information extracted by
28 the presentation recorder device from the first information or the second information;

29 communicating[[,]] from the adapter using the transeeiver, at least a portion of the
30 presentation representation from the presentation recorder device to one or more devices, the
31 communicated portion of the presentation representation including one or more keyframes from
32 the set of keyframes and a portion of the textural information.

1 2. (Currently amended): The method of claim 1[[:]] further comprising:
2 synchronizing [[the]] audio information at the presentation recorder device
3 received from the first system or from the capture device at the adapter with the selected set of
4 keyframes.

1 3. (Currently amended): The method of claim 1 further comprising:
2 storing the set of keyframes in a memory associated with the presentation recorder
3 device coupled to the adapter.

1 4. (Currently amended): The method of claim 3 further comprising:
2 receiving[[,]] at the adapter, a request at the presentation recorder device from a
3 device requesting transmission of a first portion of the one or more keyframes in the set of
4 keyframes;
5 in response to the request, determining at the presentation recorder device the first
6 portion of the one or more keyframes in the set of keyframes requested by the device and
7 corresponding audio information; and

8 wherein communicating at least a portion of the presentation representation
9 further comprises transmitting the ~~first portion of the set of keyframes~~ and corresponding audio
10 information from the presentation recorder device to the device.

1 5. (Currently amended): The method of claim 4 wherein the request received
2 from the device requests transmission of a portion of the first information received by the ~~adapter~~
3

presentation recorder device from the first system.

1 6. (Currently amended): The method of claim 4 wherein the request received
2 from the device requests transmission of a portion of the second information received by the ~~adapter~~
3

presentation recorder device from the capture device.

1 7. (Currently amended): The method of claim 4 wherein the request received
2 from the device requests transmission of audio information from the first information or the
3

second information received by the ~~adapter~~ presentation recorder device.

1 8. (Currently amended): The method of claim 4 wherein the request received
2 from the device requests transmission of video information from the first information or the
3

second information received by the ~~adapter~~ presentation recorder device.

1 9. (Currently amended): The method of claim 4 wherein the request received
2 from the device requests transmission of audio or video information received by the ~~adapter~~
3

presentation recorder device from the first system and the capture device between a start time
4 and an end time.

1 10. (Currently amended): The method of claim 1 further comprising:
2

~~processing, at the adapter, the information received from the first system and the~~

3

~~information received from the capture device to generate a first representation;~~

4

~~wherein communicating the information from the adapter further comprises~~

5

~~transmitting at least a portion of the first representation from the adapter;~~

6 wherein processing the information received from the first system and the
7 information received from the capture device to generate the first representation comprises:
8 selecting a plurality of video the one or more keyframes at the presentation
9 recorder device from video information in the first information or the second information
10 received by the adapter;

11 synchronizing the plurality of video the one or more keyframes at the presentation
12 recorder device with audio information received from the first system and with audio
13 information received from the capture device received by the adapter; and

14 storing third information related to associating the plurality of video one or more
15 keyframes with the audio information received from the first device, the audio information
16 received from the capture device, and the portion of the textual information.

1 11. (Currently amended): The method of claim 10[[:]] wherein processing the
2 information received from the first system and the information received from the capture device
3 to generate the first representation further comprises comprising:

4 generating a web page for each video keyframe in the plurality of video one or
5 more keyframes, each web page including a video frame;

6 assigning a uniform resource locator (URL) to each web page; and

7 wherein transmitting communicating at least a portion of the first presentation
8 representation comprises transmitting at least one URL assigned to a web page.

1 12. (Currently amended): The method of claim 11 wherein transmitting at
2 least a portion of the first representation comprises further comprising:

3 receiving[[:]] at the adapter, a request at the presentation recorder device from a
4 device identifying a first URL;

5 in response to the request, determining at the presentation recorder device a first
6 web page corresponding to the first URL; and

7 wherein communicating at least a portion of the presentation representation
8 comprises transmitting the first web page from the presentation recorder device to the device.

1 13. (Currently amended): The method of claim 1 wherein selecting the set of
2 one or more keyframes at the presentation recorder device in response to the user-configurable
3 threshold comprises selecting at the presentation recorder device frames of video at a
4 predetermined sampling interval.

1 14. (Currently amended): A computer program product stored on a computer
2 readable medium and executed by an adapter for communicating information received during a
3 multimedia presentation, comprising:

4 code for receiving first information at the adapter from a first system, the first
5 information comprising at least one of video information or audio information generated from a
6 presentation file;

7 code for receiving second information at the adapter from a capture device, the
8 second information including at least one of video information or audio information at least one
9 ~~of audio or video information from a capture device, the at least one of audio or video~~
10 information captured by the capture device during the multimedia presentation;

11 code for differencing between a first video frame and a second video frame of the
12 video information received from the first system or the capture device analyzing video
13 information received from the first system or video information received from the capture device
14 at the presentation recorder device to determine a difference between a first video frame and a
15 second video frame;

16 code for selecting based on the differencing, at the adapter, a set of one or more
17 keyframes from the analyzed video information received from the first system or analyzed video
18 information received from the capture device at the adapter in response to a user-configurable
19 threshold; and

20 code for analyzing the first information and the second information at the adapter
21 to extract textual information from the first information or the second information using one or
22 more recognition techniques;

23 code for generating a presentation representation at the adapter of the first
24 information and the second information, the presentation representation including a

25 representation of each keyframe in the set of keyframes and the textual information extracted by
26 the adapter from the first information or the second information;

27 code for communicating at least a portion of the presentation representation from
28 the adapter to one or more devices, the communicated portion of the presentation representation
29 including one or more keyframes from the set of keyframes and a portion of the textural
30 information.

1 15. (Currently amended): The computer program product of claim 14[[:]]
2 further comprising:

3 code for synchronizing [[the]] audio information at the adapter received from the
4 first system or from the capture device at the adapter with the selected set of keyframes.

1 16. (Previously presented): The computer program product of claim 14
2 further comprising:

3 code for storing the set of keyframes in a memory coupled to the adapter.

1 17. (Currently amended): The computer program product of claim 16 further
2 comprising:

3 code for receiving at the adapter a request from a device requesting transmission
4 of a first portion of the one or more keyframes in the set of keyframes;

5 in response to the request, code for determining at the adapter the first portion of
6 one or more keyframes in the set of keyframes requested by the device and corresponding audio
7 information; and

8 wherein the code for communicating at least a portion of the presentation
9 representation further comprises code for transmitting the first portion of the set of keyframes
10 and corresponding audio information from the adapter to the device.

1 18. (Currently amended): The computer program product of claim 17 wherein
2 the request received from the device requests transmission of a portion of the first information
3 received by the adapter from the first system.

1 19. (Currently amended): The computer program product of claim 17 wherein
2 the request received from the device requests transmission of a portion of the second information
3 received by the adapter from the capture device.

1 20. (Previously presented): The computer program product of claim 17
2 wherein the request received from the device requests transmission of audio information from
3 the first information or the second information received by the adapter from the first system and
4 the capture device.

1 21. (Currently amended): The computer program product of claim 17 wherein
2 the request received from the device requests transmission of video information from the first
3 information or the second information received by the adapter from the first system and the
4 capture device.

1 22. (Currently amended): The computer program product of claim 17 wherein
2 the request received from the device requests transmission of audio or video information
3 received by the adapter from the first system and the capture device between a start time and an
4 end time.

1 23. (Currently amended): The computer program product of claim 14 further
2 comprising:

3 code for processing the information received from the first system and the
4 information received from the capture device to generate a first representation;

5 wherein the code for communicating further comprises code for transmitting at
6 least a portion of the first representation;

7 wherein the code for processing the information received from the first system
8 and the information received from the capture device to generate the first representation
9 comprises:

10 code for selecting a plurality of video the one or more keyframes at the adapter
11 from video information in the first information or the second information received from the first
12 system and from the capture device;

13 code for synchronizing the plurality of video one or more keyframes at the
14 adapter with audio information received from the first system and with audio information
15 received from the capture device; and

16 code for storing third information related to associating the plurality of video one
17 or more keyframes with the audio information received from the first system, the audio
18 information received from the capture device, and the portion of textual information.

1 24. (Currently amended): The computer program product of claim 23 wherein
2 the code for processing the information received from the first system and the information
3 received from the capture device to generate the first representation further comprises
4 comprising:

5 code for generating a web page for each video keyframe in the plurality of video
6 one or more keyframes, each web page including a video frame;

7 code for assigning a uniform resource locator (URL) to each web page; and

8 wherein the code for transmitting communicating at least a portion of the first
9 presentation representation comprises code for transmitting at least one URL assigned to a web
10 page.

1 25. (Currently amended): The computer program product of claim 24 wherein
2 the code for transmitting at least a portion of the first representation comprises further
3 comprising:

4 code for receiving a request at the adapter from a device identifying a first URL;
5 in response to the request, code for determining at the adapter a first web page
6 corresponding to the first URL; and

7 wherein the code for communicating at least a portion of the presentation
8 representation comprises code for transmitting the first web page from the adapter to the device.

1 26. (Currently amended): The computer program product of claim 23 wherein
2 the code for ~~transmitting at least a portion of the first representation analyzing the first~~
3 information and the second information at the adapter to extract textual information from the first
4 information or the second information using one or more recognition techniques comprises:
5 code for receiving a request from a device requesting transmission of a set of
6 ~~video frames from the plurality of video frames; and~~
7 in response to the request, code for transmitting the set of video frames to the
8 ~~device~~
9 code for generating the portion of the textual information at the adapter from the
10 audio information received from the capture device in response to a speech recognition
11 technique;
12 code for identifying a speaker associated with the audio information received
13 from the capture device at the adapter based on a voice recognition technique; and
14 wherein storing the third information comprises annotating the textual
15 information in the presentation representation at the adapter with information associated with the
16 identified speaker.

1 27. (Currently amended): A system for communicating information received
2 during a multimedia presentation, the system comprising:
3 a processor; and
4 a memory coupled to the processor and configured to store a set of program
5 modules executable by the processor, the program modules comprising:
6 an input module configured to: ; and
7 receive first information from a first system, the first information
8 including at least one of video information or audio information generated from a presentation
9 file,
10 receive second information from a capture device, the secnd
11 information including at least one of video information or audio information captured by the
12 capture device during the multimedia presentation;

13 a processing module configured to:
14 analyzing video information received from the first system or
15 video information received from the capture device to determine a difference between a first
16 video frame and a second video frame,
17 select a set of one or more keyframes from the analyzed video
18 information received from the first system or the analyzed video information received from the
19 capture device based on the difference between a first video frame and a second video frame in
20 response to a user-configurable threshold,
21 analyze the first information and the second information to extract
22 textual information from the first information or the second information using one or more
23 recognition techniques, and
24 generate a presentation representation of the first information and
25 the second information, the presentation representation including a representation of each
26 keyframe in the set of keyframes and the textual information extracted by the presentation
27 recorder device from the first information or the second information; and
28 a communication module configured to communicate at least a portion of
29 the presentation representation to one or more devices, the communicated portion of the
30 presentation representation including one or more keyframes from the set of keyframes and a
31 portion of the textural information [[;]]
32 wherein the input module is configured to:
33 receive at least one of audio or video information from a first system, the
34 at least one of video information or audio information generated from a presentation file;
35 receive information from a capture device, the information received from
36 the capture device comprising at least one of audio or video information captured by the
37 capture device during the multimedia presentation;
38 perform differencing between a first video frame from a second video
39 frame of the video information received from the first system or the capture device;

40 ~~select based on the differencing, a set of one or more keyframes from the~~
41 ~~video information received from the first system or the capture device in response to a~~
42 ~~user configurable threshold; and~~
43 ~~wherein the communication module is configured to communicate one or more~~
44 ~~keyframes of the set of keyframes.~~

1 28. (Currently amended): The system of claim 27 wherein[[::]] the ~~input~~
2 ~~processing~~ module is further configured to synchronize [[the]] audio information received ~~from~~
3 ~~the first system or the capture device at the adapter~~ with the selected set of keyframes.

1 29. (Currently amended): The system of claim 27 wherein the ~~input~~
2 ~~processing~~ module ~~is further includes a processor~~ configured to store the ~~selected~~ set of
3 keyframes in a ~~memory storage device coupled to the input module.~~

1 30. (Currently amended): The system of claim 29 wherein the processing
2 module is further configured to:

3 receive a request from a device requesting transmission of ~~a first portion of the~~
4 one or more keyframes in the set of keyframes;[[,]] and wherein:
5 ~~the processor is configured to determine, in response to the request, the first~~
6 ~~portion of~~ one or more keyframes in the set of keyframes requested by the device and
7 corresponding audio information; and

8 wherein the communication module is further configured to communicate at least
9 a portion of the presentation representation by transmitting the first portion of the set of
10 keyframes and corresponding audio information to the device.

1 31. (Currently amended): The system of claim 30 wherein the request
2 received from the device requests transmission of a portion of the first information received from
3 the first system.

1 32. (Currently amended): The system of claim 30 wherein the request
2 received from the device requests transmission of a portion of the second information received
3 from the capture device.

1 33. (Currently amended): The system of claim 30 wherein the request
2 received from the device requests transmission of audio information from the first information or
3 the second information received from the first system and the capture device.

1 34. (Currently amended): The system of claim 30 wherein the request
2 received from the device requests transmission of video information from the first information or
3 the second information received from the first system and the capture device.

1 35. (Previously presented): The system of claim 30 wherein the request
2 received from the device requests transmission of audio or video information received from the
3 first system and the capture device between a start time and an end time.

1 36. (Currently amended): The system of claim 29 wherein the processor
2 processing module is further configured to:
3 select the one or more keyframes in the set of keyframes as a plurality of video
4 frames from video information received by the input module₂[[,]]
5 to synchronize the plurality of video frames with audio information received from
6 the first system and with audio information received from the capture device by the input
7 module₂[[,]] and
8 to store third information related to associating the plurality of video frames with
9 the audio information received from the first device, the audio information received from the
10 second device, and the portion of the textual information.

1 37. (Currently amended): The system of claim 36 wherein[[,]] the processor
2 processing module is further configured to:

3 generate a web page for each video frame in the plurality of video frames,
4 each web page including a video frame~~[[;]]~~ and
5 assign a uniform resource locator (URL) to each web page; and
6 wherein the communication module is further configured to communicate at least
7 a portion of the presentation representation by transmitting at least one URL assigned to a web
8 page.

1 38. (Currently amended): The system of claim 37 wherein the processing
2 module is further configured to:
3 receive a request from a device identifying a first URL, and[[,]] and wherein:
4 the processor is configured to determine, in response to the request, a first web
5 page corresponding to the first URL; and
6 wherein the communication module is further configured to communicate at least
7 a portion of the presentation representation by transmitting the first web page to the device.

1 39. (Currently amended): The system of claim 36 wherein the processing
2 module is further configured to:
3 receive a request from a device requesting transmission of a set of video frames
4 from the plurality of video frames~~[[,]]~~ and
5 wherein, in response to the request, the communication module is further
6 configured to communicate at least a portion of the presentation representation by transmitting
7 the set of video frames to the device.

1 40. (Currently amended): A method of communicating information received
2 during presentation of information from a presentation file, the method comprising:
3 providing a physical adapter;
4 receiving, at the physical a presentation adapter, at least one of video information
5 or audio information from a first data processing system communicably coupled to the physical
6 presentation adapter, the at least one of video information or audio information received during

7 presentation of the information from the presentation file and generated as a result of outputting
8 contents of the presentation file;

9 ~~differencing between a first video frame and a second video frame, at the physical
10 adapter, of the video information received from the first data processing system analyzing, at the
11 presentation adapter, video information received from the first data processing system to
12 determine a difference between a first video frame and a second video frame;~~

13 ~~selecting, at the presentation adapter, based on the differencing, at the physical
14 adapter, a set of one or more keyframes based at least upon from the analyzed video information
15 received from the first data processing system based on the difference between a first video
16 frame and second video frame in response to a user-configurable threshold; and~~

17 ~~analyzing, at the presentation adapter, audio information received from the first
18 data processing system to extract textual information using one or more recognition techniques;~~

19 ~~generating, at the presentation adapter, a representation of the presentation file
20 including a representation of each keyframe in the set of keyframes and the textual information
21 extracted from the audio information;~~

22 ~~transmitting the representation of the presentation file from the presentation
23 adapter including one or more keyframes of the set of keyframes and a portion of the textual
24 information to a second data processing system, wherein the second data processing system is
25 enabled to output the information at least a portion of the representation of the presentation file
26 received from the presentation adapter.~~

1 41. (Currently amended): The method of claim [[1]] 40 wherein ~~differencing
2 between a first video frame and a second video frame analyzing the video information received
3 from the first data processing system comprises:~~

4 comparing a first frame of video to a subsequent second frame of video; and
5 identifying the second frame as different from the first frame; ~~and further~~
6 ~~comprising~~
7 storing both the first frame of video and the second frame of video.

1 42. (Currently amended): The method of claim 41 wherein comparing a first
2 frame of video to a subsequent second frame of video identifying the second frame of video as
3 different from the first frame of video comprises:

4 comparing image pixels of the first frame of video and the second frame of video
5 or comparing results of optical character recognition (OCR) with the first frame and results of
6 OCR with the second frame.

7 comparing the difference between the second frame of video and the first frame of
8 video a predetermined threshold.

1 43. (Currently amended): The method of claim [[41]] 40 wherein analyzing
2 audio information received from the first data processing system comprises:

3 determining a portion of the textual information in response to applying speech
4 recognition at the presentation adapter to the audio information.

5 wherein identifying the second frame of video as different from the first frame of
6 video comprises comparing image pixels of the first frame of video and the second frame of
7 video.

1 44. (Currently amended): The computer program product of claim 14 wherein
2 the code for analyzing the video information received from the first system or video information
3 received from the capture device differencing between a first video frame and a second video
4 frame comprises:

5 code for comparing a first frame of video to a subsequent second frame of video;
6 and

7 code for identifying the second frame as different from the first frame; and
8 further comprising code for storing both the first frame of video and the second
9 frame of video.

1 45. (Currently amended): The computer program product of claim 44 wherein
2 the code for comparing a first frame of video to a subsequent second frame of video identifying
3 ~~the second frame of video as different from the first frame of video~~ comprises:

4 code for comparing image pixels of the first frame of video and the second frame
5 of video or comparing results of optical character recognition (OCR) with the first frame and
6 results of OCR with the second frame.

7 code for ~~comparing the difference between the second frame of video and the first~~
8 ~~frame of video to a predetermined threshold.~~

1 46. (Currently amended): The computer program product of claim [[45]] 14
2 wherein the code for analyzing audio information received from the first data processing system
3 comprises:

4 code for determining a portion of the textual information in response to applying
5 speech recognition at the presentation adapter to the audio information.

6 identifying the second frame of video as different from the first frame of video
7 ~~comprises code for comparing image pixels of the first frame of video and the second frame of~~
8 ~~video.~~

1 47. (Previously presented): The computer program product of claim 14
2 wherein the code for selecting the set of keyframes in response to the user-configurable threshold
3 comprises code for selecting frames of video at a predetermined sampling interval.